CALIFORNIA TRANSPORTATION PLAN 2025

EXECUTIVE SUMMARY

Each and every day we make transportation choices about how to get from where we are to where we want to go — to work, school, daycare, shopping, medical services, recreation, to name a few. Often our only viable alternative is to drive alone just like millions of other Californians already on our roadways.

The lack of options for getting from here to there is the result of choices — individual choice, but also choices made by those responsible for building our communities and the supporting infrastructure. Is there affordable housing near my place of employment? Are my local streets safe? Can I easily and safely walk or ride my bicycle? Is there safe, affordable transit going where and when I want to go? The answer to these and other questions limit or expand the transportation choices we each have.

Over the next 30 years, California's population is expected to increase by an average of 500,000 residents per year.[1] This means by 2020, the State's population will reach nearly 44 million, and by 2030, nearly 48 million. California's policy and decision makers and service providers will be challenged to provide for the State's growing population, while maintaining the quality of life, economic vitality, and diverse environment that has made the Golden State so attractive.

We can choose to let the future take care of itself and address the changes and their consequences as they come or we can look to the future, embrace it and the opportunities it offers to build a better life for all. We can choose to make informed decisions about how our communities will grow into the future, integrating decisions about how, where, and what types of housing we provide; where and what kind of businesses and jobs we promote; how we provide mobility and access; and how we enhance the environment in which we live.

The California Transportation Plan 2025 (CTP) offers a blueprint for just such a thoughtful and reasoned approach for meeting California's future mobility needs. This plan examines some of the future trends and challenges facing the State, and presents strategies for improving mobility while strongly supporting a growing economy and healthy environment, and providing equitable opportunities for all Californians.

"We… stand ready to work with you to address the challenge, solve the problems, and ensure that California has an adequate housing supply in the right places for its people and workforce. California's future economic prosperity depends on us working together and succeeding."

Sunne Wright McPeak
Secretary
California Business, Transportation and Housing Agency

The CTP is a long-range transportation policy plan that explores the social, economic, and technological trends and demographic changes anticipated over the next 20 years and their potential influence on travel behavior. The CTP provides a vision for California's future transportation system and defines goals, policies, and strategies to achieve the vision. The CTP proposes a balanced approach to the projected increase in demand for mobility and accessibility. By providing a common framework for decision-makers at all levels of government and

[1] California Department of Finance, Population Projections by Race/Ethnicity, Gender and Age for California and Its Counties 2000-2050, May 2004.

the private sector, the CTP seeks to guide transportation decisions and investments that will enhance our economy, support our communities, and safeguard our environment for the benefit of all.

The People's Plan

The CTP was developed through considerable public outreach and consultation with transportation partners and stakeholders. The California Department of Transportation (Department), on behalf of the Business, Transportation and Housing Agency (BTH), asked Californians to share their transportation concerns and visions for a brighter future. The Department also sought guidance from public and private sector transportation experts, providers, and decision-makers, and a multi-disciplined policy advisory group. The public's input and the experts' guidance shaped the draft CTP. The draft CTP was then released for public review and comment. The Department conducted a public opinion survey, composed of a series of focus groups and a telephone survey, sponsored numerous workshops and meetings throughout the State, distributed a summary brochure and questionnaire, developed a website that included an on-line questionnaire, and accepted comments through numerous sources.

The results of early public participation revealed that we, as Californians, are committed to making this State the best place to live, work, play, and visit. We take pride in our State and communities and have many suggestions about improving our future. We want to enhance our ability to safely access the economic, educational, cultural, and social opportunities we desire and the services we need. We want to constructively address population growth, affordable housing, land use practices, traffic congestion and resource consumption, and their impacts on mobility, the environment, our communities, public health, and our quality of life.

The following pages reflect the ideas and suggestions Californians expressed in the initial public participation effort and comments submitted during the public review and comment phase. The resulting product is a "people's plan" for guiding development of our future transportation system. Details of the public participation and outreach efforts are contained in **Appendix IV** of the CTP.

The California Transportation Plan 2025 Vision

THE VISION

California has a safe, sustainable, world-class transportation system that provides for the mobility and accessibility of people, goods, services, and information through an integrated, multimodal network that is developed through collaboration and achieves a Prosperous Economy, a Quality Environment, and Social Equity.

California faces many challenges and opportunities, including protecting our sensitive agricultural lands and natural environment while preserving our economic prosperity, and providing access to business and recreational opportunities and a desirable quality of life for all segments of our rapidly growing population. Decisions must be made today to responsibly meet the transportation demands of the future. The CTP provides a blueprint for making those decisions.

The public's comments received during the development of the CTP are broadly expressed in the vision for California's transportation system in 2025.

Vision of a Balanced System

The CTP looks to the future by envisioning a balanced transportation system that promotes sustainability. To many, transportation means the roadway system, but it is much more. It is also transit, bicycle, pedestrian, maintenance and communication facilities, railways, airports, seaports, spaceports, pipelines, and the publicly and privately owned vehicles that travel on them. We use the transportation system each day to access employment, education, shops, medical services, and to participate in social and recreational opportunities. Our transportation system is the network that connects our local, State, and national economies and allows us to efficiently move people, goods, services, and information.

"(Smart growth is)… development that serves the economy, the community, and the environment. It changes the terms of the development debate away from the traditional growth/no growth question to how and where should new development be accommodated."

United States Environmental Protection Agency

The CTP emphasizes the concept and economic and social benefits of a fully integrated transportation "system." Transportation must be planned and operated as a complete system with complementary modes, effectively connecting jurisdictions. Jurisdictional boundaries should be "seamless" or transparent to the system user.

Mobility is not mode-specific; rather it encompasses all modes. We need to choose transportation investments that will provide the greatest mobility and efficient use of the entire system. Providing transportation choices will help balance the system, improve the economy, and reduce congestion and environmental impacts.

Vision of Sustainability

Sustainability is defined as meeting the needs of the present without compromising the ability of future generations to meet their own needs. When applied to transportation, it means ensuring that economic, environmental, and social considerations are factored into decisions affecting transportation activity. A sustainable transportation system is one that meets people's needs equitably, fosters a healthy environment, provides a broad, balanced system in which the private vehicle, public transportation, bicycling, and walking are all viable options and can be maintained and operated efficiently and effectively over time.

Sustainability will result in "livable communities" that enhance our quality of life and our economy and are characterized by mixed land uses, compact development, a wide range of housing and transportation choices, walkable neighborhoods, a sense of place, preservation of open space and farmland, and rehabilitation and redevelopment in existing communities.

The term "livable communities" is often used interchangeably with "smart growth." Although "smart growth" is a term that is often debated, there is general agreement

that using smart growth principles can lead to improvements within existing communities and preservation of the environment.

Polls across the country indicate that the widely held belief is that communities no longer can afford the patterns of low-density suburban development called "sprawl." This is not a call to limit growth. It is a growing call for metropolitan development, "smart growth," that serves the economic, environmental, and social needs of all communities by encouraging reinvestment in existing communities as an alternative to suburban sprawl. Investment in infrastructure through smart growth is one of the current complementary strategies for economic recovery in California.

While transportation influences the shape of our communities and is a vital part of the social and economic fabric of California, housing is the linchpin of sustainable development. Decisions about housing (for example, what types and where to locate it), coupled with compatible land use decisions, must be connected to transportation improvements to ensure sustainable communities and a more economically competitive California. Our ability to sustain and increase our economic competitiveness, leading to a strong and prosperous economy for California will enable us to reach our goals for social equity and a healthy environment.

Providing Mobility and Accessibility

The transportation vision includes the concepts of mobility and accessibility. While these terms are closely related, there are distinctions that will become increasingly important in the future. To understand the goals, policies, and strategies outlined in the CTP, it is important to understand mobility and accessibility, and their relationship to transportation.

MOBILITY is movement and the potential for movement. It is measured in person-miles, ton-miles, and travel speeds. Mobility is affected by the cost of transportation and the available transportation choices. It is also affected by personal limitations, both financial and physical. As the cost of transportation increases, mobility often decreases. Likewise, if one's options are limited due to physical disability, mobility decreases.

ACCESSIBILITY refers to the ability to reach desired goods, services, activities and destinations or outcomes. Access is the ultimate goal of the transportation system, except for a small portion of travel in which movement is an end in itself (for example, jogging, horseback riding, and pleasure drives).

Accessibility is measured by the time and ease with which destinations can be reached. One may access a destination by actual movement or by "virtual" movement using communication systems such as the Internet, telephone, video, or teleconference systems. Accessibility is affected by distance, connectivity, congestion, transportation options, and physical capabilities. Thus, it includes the characteristics of mobility while incorporating the factors of time and ease.

Accessibility may be influenced by many factors, including urban form and street design. For example, the traditional grid street pattern has numerous options for getting from one point to another. However, late 20th century residential developments often include circuitous street patterns with cul-de-sacs, a surrounding wall, and limited entry points. Thus, while movement or mobility is still possible, current development patterns

often reduce accessibility because they limit options, decrease ease, and likely increase travel time.

Accessibility is of utmost importance to California's economy. Businesses, as well as consumers and the labor force, rely on quick access to airports, seaports, rail lines, and major highways. If access to transportation facilities, destinations, and markets is not reliable, firms may choose to locate elsewhere.

Transportation system performance can be measured by the mobility and accessibility it provides the user. The CTP proposes goals, policies, strategies, and the establishment of performance measures to enhance California's mobility and accessibility over the next two decades. It builds on current activities and policies, and proposes new approaches to make the system safer and more efficient and to provide more transportation choices for its users.

Trends and Challenges

The first step in determining how to achieve the vision for California's transportation system is an assessment and identification of the current and projected trends and challenges under which the CTP's goals, policies, and strategies will be implemented.

Transportation is an integral part of the social and economic fabric of California. It cannot be examined without considering population growth and demographics, changing travel behavior and increasing demand, safety, employment, housing, land use, the economy, technology, fuel and energy use, the environment, community values, individual opportunity, and resources. The CTP explores the impact of projected trends and demographic changes on transportation. Among the trends examined are:

- **ECONOMY:** California is the sixth largest economy in the world. Our economic status is dependent upon the safe and efficient movement of people and goods within the State, as well as to other states and countries. In addition to ensuring mobility, investments in transportation facilities can both lower our transportation costs (such as reduced accident rates, travel times, and environmental impacts), as well as provide direct, immediate, and significant benefits to our economy. Transportation investments can facilitate economic development, job creation, income, and additional economic activities, in communities without an existing economic base and in those communities whose economies are already robust. Based on estimates developed by the U.S. Department of Commerce for California, a $1 billion investment in highway and transit improvements would directly and indirectly provide over 26,000 jobs, generating about $870 million in personal income, and almost a $1.5 billion net increase in the Gross State Product. The full realization of the economic impacts of transportation investments may take up to a decade, with the majority of impacts occurring in the first three to five years of the expenditure.

- **GOODS MOVEMENT:** An estimated 45 percent of containerized cargo passes through California's ports. An efficient and effective freight transportation system is essential to economic growth, productivity, comparative advantage, national security, and the overall quality of life in California and the United States. Efficient,

technologically advanced, well organized, and well managed freight transportation systems supported by improvements in transportation infrastructure reduce delivery costs of goods and enhance competitiveness for businesses. California's Pacific Rim location and North America Free Trade Agreement status are an economic blessing; however, they are also a major security and traffic challenge.

- **EMPLOYMENT:** By 2020, employment of wage and salary workers in California is expected to grow by more than 30 percent. Employment will reach almost 20 million jobs by 2020. San Diego is projected to be the fastest growing region, at 51 percent, while the Sacramento region and San Joaquin Valley will grow by almost 40 percent. The Los Angeles region will have a 30 percent increase in employment growth. The service industry is projected to increase, while manufacturing jobs are expected to decrease from 13.2 percent to 8.4 percent by 2020.

- **TRANSPORTATION REVENUE AND EXPENDITURES:** Adequate and flexible funding is one of the greatest challenges in providing a transportation system that offers a high degree of accessibility to all Californians and supports and enhances the efficient movement of goods. The primary source of transportation revenue is the excise tax collected on each gallon of gas. The purchasing power of this tax is steadily diminishing, because it has not kept pace with inflation. Proposition 42, which dedicated the State's portion of the sales tax on gasoline to transportation in 2002, will help reverse decades of under-investment in the transportation system. However, Proposition 42 will not entirely bridge the gap between future transportation demand and revenue. There is also the need for expanded funding flexibility and resources to improve mobility and to provide funding for goods movement infrastructure.

- **ENVIRONMENT:** Vehicle fuel combustion and associated health and greenhouse gas emissions impact air quality. Transportation also affects water and visual quality, vegetation, wildlife and wildlife habitat, open space, wetlands and prime agricultural land, quality of life, health, and community livability.

- **LAND USE IMPACTS ON TRANSPORTATION:** The way communities are planned and designed has a profound impact on our travel behavior. Uncoordinated decision-making, single-use zoning ordinances, and low-density growth planning have resulted in increased traffic congestion and commute times, air pollution, greater reliance on fossil fuels, loss of habitat and open spaces, inequitable distribution of economic resources, and loss of a sense of community. A policy environment in which land use decisions are made mostly based on fiscal considerations has resulted in rejection of affordable housing projects, increased cost of new housing, and competition between local jurisdictions for retail developments that generate sales-tax revenue.

- **HOUSING-EMPLOYMENT MISMATCH:** As employment centers moved from the central city to the suburbs and edge cities in the last half of the 20th century, jobs became less accessible to inner-city residents, especially the urban poor. Employment has continued to grow in suburban areas while housing affordable to the workforce has lagged, resulting in

long commutes and congestion on corridors linking affordable housing in outlying communities with employment centers in urban areas. Additionally, communities seeking additional sales taxes revenue are further exacerbating the problem by selecting large retail developments or auto malls that replace higher paying jobs with lower paying retail sector jobs. Workers cannot afford to buy housing near their employment and may find themselves priced out of home ownership. If the housing-employment mismatch continues, Californians will experience increasing transportation costs in the form of longer commutes, degradation of air quality, and increasing costs for mobility solutions.

- **POPULATION AND DEMOGRAPHICS:** California is the most populous and rapidly growing state in the nation, and its population is expected to increase by 29 percent in the first two decades of the 21st century. The State's population is also the most ethnically diverse, having no ethnic majority. While the State's growth and diversity adds to California's economic strength and vibrancy, they also confront policy-makers with a multitude of social, economic, environmental, and transportation challenges.

- **TRAVEL BEHAVIOR:** In recent years, the number of non-work trips has overtaken the number of commute trips, leading to increased congestion during off-peak periods and more demand on local road networks. The increase in non-work trips can be partially attributed to the need to drive to most destinations, due to changes in urban and street design, and lack of safe, convenient travel choices.

Guiding Principles for Reaching the Vision

To develop a seamless, integrated, sustainable transportation system that boosts our economy and offers a high degree of mobility and accessibility to California's growing population, the CTP adopts the following four guiding principles:

- Collaboration
- Leadership
- Innovation
- Communication

COLLABORATION is part of the vision and a guiding principle. In the simplest terms, collaboration is everyone working together; but, in the context of transportation planning and programming in California, the process is a complex one shared among multiple public and private entities. It requires collaboration among transportation providers, stakeholders, and all levels of government.

Collaboration by governmental entities is multi-dimensional in scope. It must take place among geographic areas and between federal, regional, State, and city governments. It must also occur among many functions (for example, housing, transportation, and health) at each level of government.

Collaboration among policy-makers to ensure harmonization of policies is critical to successfully achieving common goals. For example, if a community or region adopts a policy to relieve roadway congestion by offering convenient and reliable transit, its land use policies should support transit service.

Collaboration is essential to selecting and implementing transportation strategies that best meet current and future local, regional, and State needs. The CTP supports meaningful communication and consensus early in the transportation planning process and their continued use throughout project development to minimize the possibility that projects could be delayed due to legal action. Reaching consensus early facilitates timely project completion.

Implementing the CTP will require a sustained commitment to share decision-making, effective system management, and the participation of federal, State, regional, local and Native American Tribal Governments, community-based organizations, the private sector, and residents. All of these voices must be heard and considered in order to achieve an integrated, connected transportation system that provides mobility and promotes economic vitality and community goals.

LEADERSHIP means defining the transportation vision, working toward the vision, taking risks to reach the vision, and inspiring and encouraging others to embrace actions and policies needed to achieve the vision.

INNOVATION is the ability and flexibility to develop, test, implement, and replicate new and creative ideas and solutions. California is a knowledge-based economy. Working closely with universities and other research institutions to develop innovative solutions to transportation problems becomes more critical as demand increases. Transportation planners and decision-makers cannot predict with certainty the technological innovations that will develop in the future. Therefore, they must continue to support advanced transportation technology research and be willing to embrace new solutions as they are proven effective. In addition, the CTP recognizes the importance of and encourages technology transfer from research and development within the universities to deployment through the private sector.

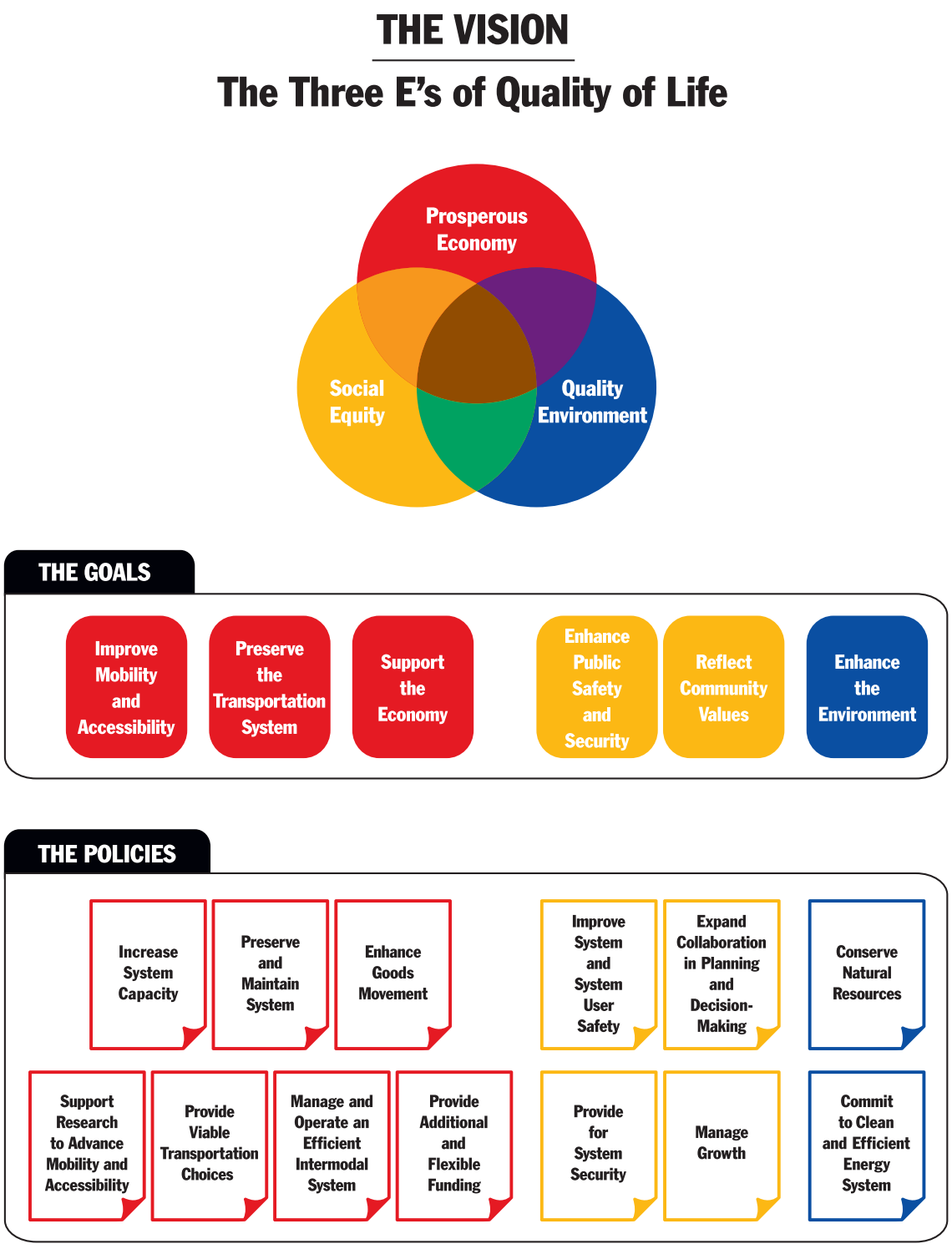
COMMUNICATION is the exchange of information and ideas. It involves both sending and receiving ideas and information, and striving to understand and relate to the concerns of others. Communication is the key to an informed public making wise transportation choices to complete their travel.

Goals

The following goals were developed based on consultation with numerous public and private transportation providers and system users during the two-phased public participation program. The goals, while identified and discussed as separate issues, are interdependent. (For example, if the system is not well maintained, the level of mobility will decline.)

FIGURE ES-1

California Transportation Plan
Vision - Goal - Policy Primary Relationship



Each of the following goals support one or more concepts contained in the vision for California's transportation system:

PROSPEROUS ECONOMY:

Goal 1. Improve Mobility and Accessibility: Expanding the system and enhancing modal choices and connectivity to meet the State's future transportation demands.

Goal 2. Preserve the Transportation System: Maintaining and rehabilitating California's extensive transportation system to preserve it for future generations.

Goal 3. Support the Economy: Ensuring the State's continued economic vitality by securing the resources needed to maintain, manage, and enhance the transportation system, while providing a well organized and managed goods movement system.

SOCIAL EQUITY:

Goal 4. Enhance Public Safety and Security: Ensuring the safety and security of people, goods, services, and information in all modes of transportation.

Goal 5. Reflect Community Values: Finding transportation solutions that balance and integrate community values with transportation safety and performance, and encourage public involvement in transportation decisions.

QUALITY ENVIRONMENT:

Goal 6. Enhance the Environment: Planning and providing transportation services while protecting our environment, wildlife, and historical and cultural assets.

Transportation Policies

The following policies were developed to support the goals and to respond to issues raised by the public and stakeholders, while being mindful of future trends and challenges. Although most policies support more than one goal, the CTP presents each policy under the goal it most closely supports.

- Increase system capacity.
- Preserve and maintain the system.
- Enhance goods movement.
- Support research to advance mobility and accessibility.
- Provide viable transportation choices.

- Manage and operate an efficient intermodal system.
- Provide additional and flexible funding.
- Improve system and system user safety.
- Expand collaboration in planning and decision-making.
- Provide for system security.
- Manage growth.
- Conserve natural resources.
- Commit to a clean and energy efficient system.

The policies are designed to preserve the transportation system and provide mobility and accessibility for California's growing population, while enhancing the State's economy, environment, and social equity. For each policy, the CTP identifies key partners and offers a number of implementing strategies designed to achieve the transportation vision and goals.

Rural Issues

Rural issues, while as acute as those in urban areas, have very different characteristics. With only eight percent of California's population, rural areas comprise 94 percent of the land area. Providing transportation services to a sparse and widely distributed population presents special transportation challenges that must be considered when planning for a balanced, interconnected system. California's economy relies heavily on the rural and interregional road and rail system in order to move agricultural products, timber, and tourists.

Rural transportation issues vary depending on the area's economic base, topography, and proximity to urban areas and tourist destinations. If located adjacent to an urban area, the rural jurisdiction might receive a "spillover" of big city problems, such as traffic and air pollution, but not receive sufficient resources to address these impacts. The CTP explores some of the issues facing rural transportation providers and offers strategies to address them.

Performance Measures

Developing performance measures and indicators to assess performance is a standard private sector business practice. Performance measures use statistical evidence to determine progress toward specific, defined objectives. This includes both evidence of fact, such as measurement of pavement surface smoothness (quantitative) and measurement of customer perception determined through customer surveys (qualitative). Performance measures provide information about how well services are being provided. Performance measures help set goals and outcomes, detect and correct problems, and document accomplishments.

BTH Agency Secretary, Sunne Wright McPeak, initiated efforts to improve the effectiveness and efficiency of State government using input from the Transportation Expert Review Panel. The panel consisted of members from external, public, and private sector entities and produced 39 recommendations, including developing system and organizational performance measures. A team comprised of members from regional and metropolitan planning agencies, and other stakeholders developed performance measures and

indicators that support the vision, goals, and policies contained in the CTP.

Integration of performance measures into long-range planning is critical to the continued success of performance measures implementation. As we endeavor to develop a more balanced and sustainable system, the evaluation of transportation objectives and related performance measures will continue. Additional efforts are already being focused towards finding measures appropriate for rural areas. The next step will be to determine what types of performance measures can be developed and used that will accurately reflect system performance in rural areas of the State.